



## MONTANA AERONAUTICS COMMISSION

Volume 20—No. 7

July, 1969

### DISCOVER FLYING DAY AT THE HELENA AIRPORT

Approximately 4700 persons attended the Discover Flying Day Open House on the Helena Airport on June 1. Following are a few sights that

were enjoyed by the Open House visitors.

(Airports, Note: We would appreciate receiving news and pictures of

all "Discover Flying" events held on airports throughout Montana.)

Morrison Flying Service had an excellent array of new aircraft—K & K Aircraft flew 2c per pound flights and introductory flights in a new Cessna 206 & Discover Flying model 150.

Tours were made of the FAA Control Tower/Flight Service Station, the U.S. Weather Bureau, the Vo-Tech School and the Terminal Building.

Particular "Thanks" goes to the CAP Cadets from Butte who acted as guides, line-boys and all around aides—to the Boy Scouts who ran a refreshment concession throughout the day and did a fine job of "picking up" the area when the event was over—and the Jobs Daughters who ran an ice cream refreshment concession.

### DIRECT DIAL MAC



The new telephone number of the Montana Aeronautics Commission is 449-2506.



View over the wings of the 102 east to the Aeronautics Commission—Fish and Game and National Guard.

The Aeronautics Commission had a number of displays and held showings of the movie "Montana and its Aircraft" throughout the day.

Seen in the background is the aircraft display of the Montana Fish and Game department. Inside the Department had displays and to the delight of the youngsters, a year old Timber Wolf and a small cub bear.

The Montana National Guard helicopters demonstrating close order formation flying. (note masthead).

The Guard presented a number of demonstrations of barrier landings and a variety of aerial maneuvers. The Special Forces made several parachute drops during the day. The Guard's static display of aircraft included an Army Mokawk—an impressive sight on the ground and in the air.

(Photos Continued on Page 7)



**Official Monthly Publication  
of the  
MONTANA AERONAUTICS  
COMMISSION**

**City/County Airport**

**Box 1698**

**Helena, Montana 59601**

**Forrest H. Anderson, Governor**

**Charles A. Lynch, Director**

Clarence R. Anthony, Member  
Robert G. Bricker, Member  
John Hebbelman, Jr., Member  
Jack R. Hughes, Member  
Dr. B. P. Little, Member  
David Matovich, Member  
James A. Steffeck, Member



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## PAUL HARVEY TO SPEAK AT STANFORD DEDICATION OF NEW AIRPORT LIGHTING

Formal dedication of the airport lighting system at Stanford will be held on July 12 in conjunction with "Paul Harvey Day."

### EVENTS

Paul Harvey (nationally known ABC news commentator) will be featured speaker at the Stanford Rodeo Arena in the afternoon.

Beef Barbecue and Matched Horse Racing.

Dedication of the Airport Lighting System in the evening followed by a dance.

This is a community fund raising project sponsored by the Stanford Commercial Club and the Judith Basin Jaycees. \$5.00 per person.

The hopes of yesterday are today's experiences.

## SEARCH & RESCUE OFFICIALS DECLARE SUPPORT OF DART PROGRAM

The aviation officials of the Western States, officials of FAA and the Western Aerospace Rescue and Recovery Center recently held a Conference at Hamilton Air Force Base, California. The group met to discuss their various problems, responsibilities and cooperative measures to increase the effectiveness in search and rescue procedures.

A major portion of the Conference was devoted to the "Downed Aircraft Rescue Transmitter" (DART) program. The following is a reprint of the agreement which came as a result of the conference.

**SEARCH AND RESCUE AGREEMENT BETWEEN ALASKAN, CENTRAL AND WESTERN REGION FEDERAL AVIATION ADMINISTRATION — STATE AVIATION AGENCIES OF THE INLAND SAR REGION — ALASKAN AIR COMMAND — WESTERN AND CENTRAL AEROSPACE RESCUE AND RECOVERY CENTERS IN SUPPORT OF THE NATIONAL SEARCH AND RESCUE PLAN.**

1. Purpose: This agreement supplements the National SAR Plan. It establishes procedures for requesting flight plan aircraft, transiting the area of an aircraft incident involving a downed aircraft rescue transmitter (DART), to monitor distress frequencies and report emanations to the appropriate Aerospace Rescue and Recovery Center through FAA Air Route Traffic Control Centers.

2. Scope: This agreement is applicable to incidents occurring in the states of Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington and Wyoming.

#### 3. General:

a. Western Aerospace Rescue and Recovery Center exercises operational control of federal rescue forces in the Western Inland SAR region under authority of the National SAR Plan.

b. Central Aerospace Rescue and Recovery Center exercises operational control of

federal rescue forces in the Central Inland SAR Region under the authority of the National SAR Plan.

c. Commander, Alaskan Air Command exercises operational control of rescue forces in the Alaskan theater of the Overseas SAR Region under authority of the National SAR Plan.

d. Western FAA Region exercises operational control of all FAA facilities within the nine western states of Arizona, California, Colorado, Idaho, Nevada, Oregon, Utah, Washington and Wyoming.

e. Central FAA Region exercises operational control of all FAA facilities within the states of Montana and Wyoming.

f. Alaskan FAA Region exercises operational control of all FAA facilities in Alaska.

g. Signatories for the eleven applicable states authoritatively represent their government to this agreement.

#### 4. Agreement:

a. FAA facilities will notify the appropriate Rescue Coordination Center through their Region Communications Center of all incidents involving aircraft equipped with downed aircraft rescue transmitters wherein the aircraft is unreported and suspected to be down.

b. FAA facilities will notify all flight plan aircraft transiting the area of the incident that an aircraft is overdue and equipped with a downed aircraft rescue transmitter and request their assistance in monitoring emergency distress frequencies and report the geographic position of maximum signal reception.

c. The appropriate Aerospace Rescue Coordination Center will be responsive to all downed aircraft rescue transmitter reports to coordinate the dispatch of DF equipped aircraft to pinpoint the downed aircraft location and the recovery operations for survivors.

d. State aviation agencies will be responsive to all aircraft rescue transmitter reports and coordinate their activities with the appropriate Aerospace Rescue Coordination Center, and those states having aircraft equipped with direction finding (DF) equipment will provide DF equipped aircraft to locate the downed aircraft rescue transmitter and will, upon the request of the Director of Aeronautics of adjacent states, or upon request of the Aerospace Rescue Coordination Center, provide DF equipped aircraft to assist in locating transmitters in neighboring states.

e. This agreement will become effective upon signature but may be changed by mutual written consent as may be necessary.

This agreement signed by officials of: FAA Alaskan, Central and Western Regions; Commanders of Western and Central ARRC and States of Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington and Wyoming.



Aviation officials of the Western States and WARRC at a recent S & R meeting: (lt. to rt.): MAC Director C. A. Lynch; Idaho Department of Aeronautics Director Chet Moulton; WARRC, Commander Col. Thomas K. Potter, Jr.; California Division of Aeronautics Director Joseph R. Crotti and Washington Aeronautics Commission Director, Ron R. Pretti.





## CALENDAR

**July 4, Jordan** — Fly-In Breakfast hosted by the Skyriders, held in conjunction with the Garfield County Golden Jubilee celebration. Breakfast free to all flying in.

**July 4, 5, & 6, Coeur d'Alene, Idaho** — Western Flight Roundup — Fly-In for Oregon, Washington, Utah, Idaho and Montana Pilots.

**July 9 & 10, Helena** — Montana Aeronautics Commission's Monthly Meeting.

**July 12, Stanford** — Paul Harvey (ABC News Commentator) will speak at the Stanford Rodeo Arena, Saturday afternoon. Beef Barbecue — Matched Horse Race and DEDICATION OF AIRPORT LIGHTING SYSTEM.

**July 13, Chester** — 2c a pound rides. Proceeds will assist in financing the summer recreation Youth Program.

**July 26 & 27, Ekalaka** — Annual Fly-In sponsored by the Billings MPA Hangar.

**August 23 & 24, Spokane, Washington** — First Annual Spokane International Air Show, at Spokane International Airport.

**September 4-9, Atlantic City, New Jersey** — 1969 AOPA Plantation Party. Chalfonte-Haddon Hall Headquarters.

**September 15, Billings** — The AOPA Air Safety Foundation's "Pilots Safety Seminar" held at the Library Building, Eastern Montana College, 8:00 p.m.-10 p.m.

**September 26 & 27, Edmonton, Alberta, Canada** — INAC Annual Convention. Headquarters — Chateau La Combe.



## TOWER OPERATIONS

MAY, 1969

	Total Operations	Instrument Operations
Billings	13,093	2,282
Great Falls	12,487	2,097
Missoula	12,069	448
Helena	6,013	622

## COMMISSION HOSTS CANADIAN DELEGATION

The delegation of Canadian officials arrived in Helena on June 2 for the combined meeting of members of the Canadian Cabinet, officials of the Department of Transport, the Alberta Aviation Council and the Montana Aeronautics Commission.



Governor Forrest Anderson greets Mr. Fred Winters, Alberta Aviation Council. Others shown are Mr. W. R. Williamson and Mr. H. J. Taylor of the Department of Transport.



MAC's Director Lynch, Jack Wilson and Duane Jackson pose with a number of the Canadian delegation on the steps of the State Capitol.

Due to interest in the development of a Canadian counterpart to the Aeronautics Commission in the Province of Alberta, the Canadian group was interested in obtaining information relative to airport and airstrip development, hospital heliports, aviation education, search and rescue, publications and pilots aids and navigational aids. Reports were presented by various staff members of the Commission followed by discussion sessions.

The group met with Governor Forrest Anderson and then toured the Capitol.

The delegation departed on June 4 after making a tour of the Yellowstone Airport at West Yellowstone.

Members of the Canadian group were:

**Cabinet Members, the Honorables:** G. E. Taylor, Minister of Highways and Transport, and chairman of the Cabinet Aviation Committee;

E. Gerhart, Attorney General; R. Patrick, Minister of Mines and Minerals; F. Colborne, Minister of Municipal Affairs and J. Joyce, Ministerial Assistant to G. Taylor.

**Officials from the Department of Transport:** G. E. McDowell, K. H. Ewing, W. R. Williamson, H. J. Taylor, S. R. Lantinga, L. R. Rodewolt and A. L. Finch.

**Alberta Aviation Council representatives:** Roy R. Staniland; Ross McBain, Fred Winters and G. A. Sam Steele.

## 801st RADAR SQUADRON TO BE DEACTIVATED

The 801st Radar Squadron, one of Malmstrom Air Force Base's most prominent facilities will be deactivated by December, 1969.

The move was announced by the Department of Defense and is another step in the decision, to begin a phased modernization of the air defense system. The deactivation will affect 96 military and 7 civilian personnel at the squadron. The squadron is commanded by Capt. Byron Clark.

The 801st Radar Squadron was activated at Malmstrom in February, 1964 and since that date has seen many changes in equipment and physical facilities. The most prominent is a nine-story FPS-24 search radar tower which at one time was under the control of the FAA's Great Falls Air Route Traffic Control Center.

The FPS-24 search radar eventually will be removed from its tower and replaced with a smaller, more compact radar. The new search radar will be linked to the 28th Air Division's SAGE control system and the FAA's ARTC Center, but will be under the control of the FAA.

During the dismantling work on the FPS-24 tower a small, portable search radar will be set up to prevent any loss of radar coverage in the Great Falls area. A search radar capability is critical for the FAA if it is to maintain positive control of civilian and military traffic arriving and departing from Great Falls International Airport.



## AIRPORT NOTES



By James H. Monger  
Assistant Director, Airports

**Missoula Bonds**—The Missoula County Commissioners had a bidding session for the sale of \$485,000 worth of bonding for financing an improvement project on the Johnson-Bell Field. The lowest and successful bidder for furnishing the bonds was D. A. Davidson & Company of Great Falls at 5.37% interest. M & S Construction Company is now well under way with the 1.3 million dollar project at Missoula. The project will consist of lengthening and strengthening Runway 11/29 along with necessary lighting and other appurtenant work. Total runway length will be 9,200 feet.

**Lewistown**—The Montana Aeronautics Commission met on June 12 for the quarterly review of the airport loan program. At that time the MAC approved a loan to the Lewistown Airport Commission for \$60,000. The loan will be repayable at 4½% over a ten year period. The Commission informed Lewistown that due to financial and budgetary limitations, the Lewistown loan would not be available until one year from this time. The loan is to be used for a major expansion of the administration building on the Lewistown Municipal Airport. The building addition will house a banquet room for the airport cafe and the major part of the addition will be for the relocation of the Flight Service Station from the old metal FAA buildings.

**Senate Bill 1558**—Senator Frank E. Moss from the State of Utah has introduced Senate Bill 1558 into the United States Senate on March 7. The bill calls for an expenditure of up to three million dollars to provide for airports on Indian reservations. The bill now has been referred to the Committee on Interior and Insular Affairs.

**Yellowstone H-Marker**—The FCC has notified the MAC that the H-marker (low frequency radio homer beacon) at the Yellowstone Airport will carry an identifier of LOW. The

frequency will be 338 Kc/s. The H-marker is now under construction and pilots will be notified as to its commissioning date as a VFR aid. Later this summer it will receive IFR certification.

**New Airports**—Construction is nearing completion on the new airport in Lincoln County, 8 miles south of the city of Libby. Pilots will be advised as to the official opening of the airport and are asked not to use it until that date. The new general aviation utility airport at Philipsburg is approximately 50% completed.

**NOTAMs**—Pilots are urged to use caution and good judgment when flying into the following airports: Glacier Park International, Logan Field, Great Falls International, Helena, Sidney-Richland, Big Timber, Missoula and Butte. Men and equipment are on the airport working on major improvement projects. The equipment operators must occasionally be on the runways and even though they have been warned, it is extremely difficult for them to see or hear an approaching aircraft.

## SHELBY MPA HANGAR PROMOTES YOUTH PROGRAM

Members of Shelby's MPA Hangar flew 2c per pound flights with the proceeds going towards the local summer recreation Youth Program. Although the weather was a little discouraging, the project, co-sponsored with the local Kiwanis Club, raised a total of \$109.

Hangar members who donated their time and aircraft were: Bob Hellinger, Don Johanssen, O. D. Gifford, Jim Grinde, Norman Sonju and Leroy Abel.

Added feature: Discover Flying "First Flight" Certificates, supplied by the AOPA, were awarded to all passengers who had their very first airplane ride during the day.

On July 13th the Shelby Hangar with the co-sponsorship of the Rotary Club will hold a similar project with proceeds going toward Chester's summer recreation Youth Program.

Congratulations to the Shelby Hangar members for their efforts on behalf of Montana Youth!

Space experts estimate that 70 per cent of all objects sent into orbit around the earth continue in orbit for at least five years before decaying.

## RICHARD BRODOWY JOINS GADO 9 STAFF

Richard Brodowy has assumed his duties as a General Aviation Maintenance Inspector for FAA's GADO in Helena.



New Inspector Richard Brodowy.

Mr. Brodowy, a native of Minneapolis, Minnesota, received specialized training at the following: St. Paul Vocational; National Youth Administration Aircraft Mechanics; U.S. Navy Aircraft Electrician School at Jacksonville, Florida and he received his A&P license and his private pilot license from Brayton Flying Service in St. Louis.

He served as a Navy aircraft electrician for two years and has remained in the Navy Air Reserve since 1956.

Prior to joining the FAA, he was employed as a mechanic by Northwest Airlines; Wisconsin Central Airlines; Northwestern Aeronautical Corp; Minnesota Airmotive Inc. (as Crew Chief) and Airmotive Enterprises, Inc. Brainerd, Minnesota (as Shop Manager).

We extend a welcome to the Brodowys—Dick, wife Dorothy, sons Thomas, Richard, James and daughter Jeralyn. Another son, Theodore is serving aboard the U.S. Enterprise in the South Pacific.

Dick joins the following GADO 9 staff: Lee C. Mills, Supervising Inspector; Arthur A. Kurth, General Aviation Operations; Inspector Charles R. Taylor, General Aviation Maintenance Inspector; Charles L. Lane, General Aviation Operations Inspector; Lauren D. Basham, Accident Prevention Specialist; Elsie Childs, Aviation Clerk; Helen Dunlop, Clerk-Stenographer and Elizabeth Andersen, clerk-typist (Neighborhood Youth Corp.)



## AERONAUTICS MECHANIC STUDENTS TOUR SEATTLE AREA PLANTS

The Helena Vo-Tech School (one of only 100 certified A & P schools in the nation) recently afforded fourteen of the students in the aero division of the school with a field trip to Seattle. The students were accompanied by four instructors of the Vo-Tech School: William McCurdy, William Chambers, Harold Keilman and Ralph Williamson. Following is the account of the trip by Instructor Keilman.

"We arrived in Seattle Monday evening May 26 via chartered bus. The tour covered Robertson STOL Tuesday morning, United Air Lines at SEATAC Tuesday afternoon, and all day Wednesday was spent at Boeing. The companies really rolled out the welcome mat for us.

Robertson gave us a very good tour and was exceptionally co-operative and friendly. At the time of our visit they were modifying a Cessna 210 aircraft. In the shop also was a Cherokee that Robertson's had just completed and was in the process of obtaining an S. T. C. on it. Mr. Howard Piper was inspecting the modifications at the same time we were going through the shop. On the flight line there were two completed Robertson modifications, a Cessna Super Sky-master that was headed for Africa and a Cessna 206 that was test flown for us. It was really amazing the performance obtained when Mr. McKay could land and come to a full stop and then take off in less distance than was used for takeoff by another plane that left just ahead of him.

Tuesday noon, United Air Lines invited us to lunch which was preceded by an inspection of the U. A. L. kitchen at SEATAC by Mr. Wes Ebert. As on any tour you are always given facts and figures. Two of the more surprising facts on U. A. L. food service is that the company prepares approximately 45,000 meals daily and they buy their steak ready to cook for 4 dollars per pound. Mr. Tom Kelly, employment representative for the Northwest Region, who arranged our tour, talked to the group and did a good job of emphasizing what an employer expects of an applicant. Mr. Kelly then turned us over to Mr. Don Ross, Maintenance Manager for U. A. L. at Seattle. Mr. Ross explained the maintenance procedures of a large airline and emphasized



Group during tour of Robertson's STOL factory: Lt. to Rt.: Holm, Wudel, Nydam, Taylor, Instructor Williamson, Mitchell, Guttormson, Shallburg, Instructor Keilman, Knopfle, Instructor Chambers, Mathis, Instructor McCurdy, Steffens, and Roth.

some of the economic aspects of running an airline, the scheduling, and servicing. We inspected the maintenance facilities and a Boeing 720. We finished the tour by inspection of the terminal and watching the mechanics as they performed their duties on the flight line.

Tuesday evening was left free for the inspection of downtown Seattle and all of us had a ride on the Monorail and explored the Space Needle.

We were received at Boeing's Everett Plant by Mr. Joe Wilker. It is here that we got to see the 747. The building the 747 is being built in has 3 sets of hanger doors in one end that measure 81 ft. high by 300 ft. long. While we were there they were just starting to assemble plane number 22. Mr. Wilker told us that by mid 1970 Boeing would be completing one of these 22 million dollar planes every 2½ days.

A few facts and figures on the 747; the fuel capacity is 300,000 lbs. or 5 tank cars full or approximately the gross weight of a 707; one wing is 15 ft. short of the Wright Brothers first flight; the pilots are 60 ft. above the runway when landing or taking off; each engine has 43,500 lbs. thrust and costs 1½ million; and the auxiliary ground power unit in the tail has 11,000 lbs. thrust.

Mr. Jack Faus, who hails from Forsyth, arranged for us to have lunch in Boeing's Seattle plant cafeteria and then took us on a very good tour of the Seattle plant. At this plant we got to inspect the production and assembly of the 737, a good close up of their automatic riveter and a look at a 15,000 dollar piece

of aluminum (upper wing skin of the 737). It was in this assembly area we go to see the production forming of sheet aluminum, the heat treating and cleaning of aluminum parts, and the machining of aluminum castings, etc. This was especially interesting as all the students had just finished sheet metal and had accomplished some hand forming and studied these forming processes.

After a quiet trip back to Helena Thursday, we concluded a very interesting, educational, and enjoyable trip. The students who were able to go on this tour received a more complete knowledge and background of aircraft maintenance, which will make them more valuable as mechanics in the future.

Students on the Seattle tour were: Larry Douglas, Deer Lodge; John Guttormson, Helena; Pete Holm, Helena; Rodney Knopfle, Deer Lodge; Ted Mathis, White Sulphur Springs; Bill Mitchell, Landusky; Robert Nimmick, Helena; Andy Nydam, Twin Bridges; Doyle Roth, Missoula; Steve Shallberg, Missoula; Joe Steffens, Helena; Ken Taylor, Kolin; Albert R. Wudel, Helena; and Jim Zimmer, Helena."

### TINY BUT MIGHTY

A flea leaps 200 times its length—a man would have to jump 1,200 feet to equal this proportionately; a housefly takes 440 steps to travel three inches, and does it in half a second—corresponding to a man running 20 miles in a minute.

By 1979, about 7,000 general aviation planes are expected to be jet powered.



# CONGRATULATIONS FAA CERTIFICATES ISSUED RECENTLY TO MONTANA PILOTS



## STUDENT

White, Arnold L.—Red Lodge  
Larson, Allen L.—Billings  
Saier, Alarich F.—Ennis  
Munson, Beauford E.—Grass Range  
Meyer, Harlan G.—Gillette, Wyo.  
Schumacher, Roland—Billings  
Fitzhugh, Ves B.—Malmstrom AFB

## PRIVATE

Lindsey, LeRoy—Columbia Falls  
Chapman, Bill S.—Gardiner  
Breazeale, Paul C.—Missoula  
Mirehouse, Richard T.—Augusta  
Werhane, William L.—Missoula  
Vermulm, Jay L.—Conrad  
Little, Stephen R.—Missoula  
Swanberg, Alfred V.—Kalispell  
Hansen, Michael L.—Glasgow  
Sweat, Robert E.—Great Falls  
Lancaster, David L.—Great Falls  
Abrams, Thomas H.—Missoula  
Bukoskey, Ralph E., Jr.—  
Judith Gap  
Lorenz, John—Butte  
Webster, Geneva L.—Whitefish  
Turk, David H.—Missoula  
Klein, John W.—Honolulu, Hawaii  
Blackler, Edwin E.—Missoula  
Nerison, Don A.—Missoula  
Cox, Clifford N.—Winston  
Fitzgerald, George A.—Jordan  
Johnson, Greg S.—Conrad  
Seymour, George N.—Shelby  
Nelson, Eric A.—Anaconda  
Blanchfield, Michael F.—  
Wycoff, N.J.  
Brewer, Thomas W.—Powderville  
Groomes, John H.—Philipsburg  
Knudsen, George E.—Malta  
Cebulski, Kenneth R.—Malta  
Mosley, Randall D.—Missoula  
Williamson, Carl D.—Missoula  
Taber, Robert L.—Missoula  
Thurman, Richard C.—Missoula  
Anderson, Eugene—Philipsburg  
Barnett, Joel L.—Missoula  
Maxwell, Lawrence J.—Missoula  
Cook, Nancy A.—Hamilton  
Shinn, Michael L.—Wheatridge,  
Colo.  
MacKenzie, Alexander J.—Volcano,  
Hawaii  
Tousey, David M.—Olney  
Sibert, Gary J.—Great Falls

Noel, James R.—Hobson  
Bryant, Otis M.—Lewistown  
Miller, Robert W.—Sanders  
Clark, Donald L.—Grass Range  
Moos, Edwin—Circle  
Olfert, Ronald W.—Frazer  
Pawlowski, Dale G.—Circle  
Hutchens, James M.—Circle  
Bell, Lawrence H.—Glasgow  
Phoenix, Stephen R.—Billings  
Loos, Joseph E.—Miles City  
Ratlidge, Thomas D.—Hardin  
Pecora, Luis—Billings  
Schultze, William T.—Billings  
Wehrman, Eugene D.—Billings  
Foster, Ree E.—Fairview  
Guslander, James R.—Lewistown  
Hardy, John W., Jr.—Fairview  
Kreitzberg, Terry D.—Billings  
Abbey, Dennis R.—Billings  
Cassady, Daniel R.—Billings  
Reinecke, Leon H.—Billings  
Price, John Y.—Billings  
Argenbright, Edward F.—Big  
Timber  
Purcell, Thomas O.—Billings  
Cady, Lewis A.—Billings  
Zelka, James D.—Hardin  
Harsch, Clarence—Hardin  
Wright, Robert E., Jr.—Hardin

## COMMERCIAL

Sorensen, Arnold C.—Kremlin  
King, Richard T.—Helena  
Binkley, Stephen L.—Great Falls  
Davis, A. D.—Lewistown  
Ross, Gale D.—Lewistown  
Malsam, Leroy J.—Havre  
Pope, Lawrence L.—Lewistown  
Storm, Harold N.—Havre  
Ruwad, Ronald K.—Salt Lake City  
Lemm, Richard W.—Spearfish, S.D.  
Ruibal, Julian A.—Brighton, Colo.  
Todd, Jack E.—Billings

## A T R

Rogers, Julian W., Jr.—Utica  
Andersen, Rodney E.—Bozeman

## INSTRUMENT

Brummit, Larry E., III—Brunswick,  
Georgia  
Finstad, Edward L.—Helena  
Sheridan, Daniel M.—Butte  
Tiitola, Tuomas T.—Missoula  
Houtz, Ronald P.—Fort Collins,  
Colo.  
Biggerstaff, Edmund A.—Billings  
Davis, James R.—Billings  
Hilling, Stanley C.—Billings  
Christensen, Jay M.—Salmon, Idaho

## MULTI ENGINE

Smuin, Douglas K.—Missoula  
Hamer, R. Blair—Helena  
O'Connor, Dallas G.—Billings  
Case, Gaylord J.—Billings  
Meyer, Patrick J.—Helena

Hildebrandt, Earl E.—Billings  
Hilling, Stanley C.—Billings

## FLIGHT INSTRUCTOR

Ludwig, Larry E.—Libby  
Ivey, Delbert G.—Great Falls  
Billmayer, Gene C.—Harlem  
Skroch, Robert M.—Darby  
Dutton, Joseph M.—Sand Springs  
Mobley, Gerald E.—Billings  
Mattson, Ronald B.—Shelby

## FLIGHT INSTRUCTOR INSTRUMENT

Newby, Paul G.—Bozeman

## ADVANCED GROUND INSTRUCTOR

Ivey, Delbert G.—Great Falls

## ROTORCRAFT

Young, Ronald F., Jr. (Comm.)—  
Billings  
Taylor, Jeron (Comm.)—Billings

## FLIGHT INSTRUCTOR ROTORCRAFT

Bonnell, Raymond H.—Seeley Lake

## AIRFRAME MECHANIC

Dorland, David H.—Missoula

## POWERPLANT MECHANIC

Fitzsimmons, Irving T.—Helena  
Mlekush, Donald R.—Helena

## STATISTICS

Will your first accident be your last  
day alive?

61/37
65/22
78/18
69/18
56/19
26/12/7

	Accident Total	Fatali- ties	Presumed Fatali- ties
1964 Total	61	37	
1965 Total	65	22	
1966 Total	78	18	
1967 Total	69	18	
1968 Total	56	19	
1969 To-Date	26	12	7

## FEDERAL AVIATION ADMINISTRATION ITINERARY LISTING

Airport	July	Aug.	Sept.
Culbertson	—	6	—
Glasgow	9	—	10
Glenview	24	—	25
Great Falls	10	7	4
Lewistown	—	20	—
Miles City	—	21	—
Missoula	24	21	25
Sidney	23	—	24

NOTE: Provisions have been made to give private, commercial and flight examinations ON AN APPOINTMENT BASIS ONLY at the following FAA Flight Service Stations:

Bozeman	Lewistown
Butte	Livingston
Cut Bank	Miles City
Dillon	Missoula
	Great Falls





Stolp-Adams Starduster owned by Gordon Schmidt of Great Falls, and the 1931 Moth owned by M. H. "Swede" Lindgren, chief pilot for the Montana Highway Department. Seen in the foreground is the tail boom of a original designed helicopter owned by Jim Milligan of Helena.

Visable in the background is the tail of the Highway Department's camera equipped Aero Commander. The Department also had an exceptional display of aerial photography.



F-102 from the Air Guard, Malmstrom AFB—a featured attraction as the visitors had the opportunity to "climb up and take a good look." Seen in the left background is the Stagger-Wing Beech owned by Fred Naegele of Helena.



Gull-Wing Stinson—flown in from Billings by owner Lyndon Pomeroy.

## FAA INSPECTORS CORNER



### SAFETY IN RETROSPECT

By LAUREN D. BASHAM

Accident Prevention Specialist  
GADO No. 9

The pilot of Cessna N8962Z watched the earth moving beneath him at a bare three miles per minute while the two engines in front of him droned endlessly. He marveled that he had spent more than one year of his life flying. No supersonic craft—this—but a "pilot's airplane" in which he had lived aloft the normal life span of one set of engines and well into another. He had flown this route so many times that his mind raced onward with a mental picture of the rivers, hills and valleys which slowly unfolded before him.

On his right, sound asleep now one hour after take-off sat his employer, a non-pilot but well indoctrinated passenger, having shared much of the life time of 62Z.

BANG! "What's that," his passenger, now wide awake, asks. "We've got trouble," the pilot replied, "I think we're losing an engine."

Propellers forward — throttles forward — mixture, fuel flow adjusted to the low side of the dial. A fluctuating oil pressure gauge is noted and the right engine is throttled back. Mixture, idle cut-off and the engine feathered. As the propeller rocks to a stop, the airplane is trimmed 3°-5° right, wing low—the side of the inoperative engine.

The airspeed has now settled to approximately 150 indicated, the altimeter unchanged from 4500 feet. The power is readjusted on the left engine, the altimeter still holding nicely.

"What now," the passenger asks. "Well, we'll contact Sky Harbor and tell them we are inbound on the 080° radial, 4500 feet and 30 DME miles out with an engine shut down," the pilot replies. "We're in good shape now."

Sky Harbor acknowledges the contact and 62Z is cleared straight in on runway 32L.

Since the engine shut down involved "memory" items only, the pilot now secures all switches with



the aid of the emergency check list. Sixteen minutes later, the river passes beneath 62Z and the boundary comes up smoothly. Back on the throttles and full flaps. Nose wheel up—wheel back—hold it off! Throttle closed. N8962Z rolls out smoothly on the runway and is taxied to the ramp.

Pure fiction? Not entirely—for the hand that moves this pen was the hand that guided 62Z to the runway threshold in Omaha, Nebraska on a certain summer day a short few years ago. The emergency, though real enough, was routine since the company involved realized that single engine proficiency without practice in single engine procedures was very unlikely. All it takes is one emergency to prove the point.

An average flight between two points can be broken into three components — namely departure, enroute and approach. When a pilot loses an engine on departure, his primary concern is performance — his own and that of the aircraft. When a pilot loses an engine while enroute, the aircraft is in a clean configura-

tion with performance increasing as fuel burn-off occurs. Here, technique and procedure is important. If the engine loss occurs in the terminal area, the pilot is faced with an emergency involving a single engine landing with little time to plan ahead. If the engine loss occurs during instrument conditions, the pilot's problems are compounded.

In summary, the pilot should know, before he takes off, what the performance of his airplane is for temperature, altitude and weight of the airplane. He should be mentally prepared for an engine failure. If an engine does fail, he should know what to do and how to do it. This proficiency can only be gained and maintained by practice of single-engine procedure under the supervision of a competent instructor simulating engine failure during enroute and terminal area procedures. The best time to practice for any emergency is before the emergency becomes real — then **Safety is Truly No Accident.**

## SPOKANE INTERNATIONAL AIRSHOW

The First Annual Spokane International Air Show will be held on August 23 & 24, at Spokane International Airport. Pacific Airshows, Inc., a group of Spokane business leaders, will sponsor the two-day event.

Headlining the varied program is Art Scholl's World Air Show. Scholl, a member of the U.S. Aerobatic team, is one of the world's outstanding stunt pilots. Also participating in the program will be Paul Probereznny, president of the Experimental Aircraft Association, piloting a P-64; Larry Blumer in a P-38 and Freddy Ludtke flying a Monocoupe.

The Boeing 747 Jumbo Jet will make an appearance on the opening day.

Static displays will feature an array of commercial, military, antiques, homebuilts, helicopters and general aviation aircraft.

### MEMBER

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**PURPOSE:**—"To foster aviation as an industry, as a mode of transportation for persons and property and as an arm of the national defense to join with the Federal Government and other groups in **research, development, and advancement of aviation**; to develop uniform laws and regulations; and to otherwise encourage co-operation and mutual aid among the several states."

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